



GILL

MAXIMET GMX603

High quality integrated weather station with high accuracy optical precipitation sensor.

PRODUCT OVERVIEW

MaxiMet compact weather stations are simple to install, use and maintain. In addition to providing measured parameters, the products derive additional parameters and data is output as a single string and available on a range of communications protocols.

MaxiMet weather stations benefit from the same technology used in Gill's scientific product range, ensuring measurement accuracy, low maintenance and continuous status reporting.

The MaxiMet family includes a range of sensor configurations allowing customers to select the model most appropriate to your needs.

KEY FEATURES

- 01** Six measured parameters:
Wind speed & direction, temperature, humidity, pressure, rainfall.
- 02** Includes integrated high accuracy optical precipitation sensor with no moving parts requiring minimal maintenance.
[See TruMet PW100 datasheet for more specific information.](#)
- 03** Multiple additional derived parameters based on combining measured parameters, such as gust, average wind speed and dew point.
- 04** High quality, accurate, solid state sensors.
- 05** 2-axis compass.
- 06** Optional integrated GPS capability available to provide location, GPS timestamp and a calculation of true wind if the platform is moving.
- 07** Optional low power heating.

BENEFITS

- High quality measurement data due to careful sensor selection and extensive design testing and verification.
- Easy to set-up and integrate using comprehensive software to select the reported and derived parameters and measurement units.
- Easy to install and long operational life, due to a compact, robust design and the selection of low maintenance sensors.
- Suitable for use with battery or solar systems in low power mode.

MaxiMet GMX603 measures liquid precipitation using high accuracy optic technology.



MAXIMET GMX603

High quality integrated weather station with high accuracy optical precipitation sensor.

TYPICAL APPLICATIONS

- Control systems including smart buildings, agriculture and industry
- Environmental monitoring
- Solar farms
- Reporting systems for transport and safety
- Low power/solar powered deployments and IoT applications

TECHNICAL SPECIFICATION

WIND SPEED	
Range	0-60 m/s
Accuracy	0-10 m/s 0.3 m/s RMSE 10-40 m/s 3% RMSE 40-60 m/s 5% RMSE
Resolution	0.01 m/s
Starting threshold	0.01 m/s
Units of measurement	m/s, km/h, mph, kts, ft/min

WIND DIRECTION	
Range	0-360°
Accuracy	0.5 m/s-40 m/s ±3° 40-60 m/s ±5°
Resolution	1°
Units of measurement	degrees

AIR TEMPERATURE	
Range	-40°C to +70°C with heating
Accuracy	±0.3°C
Resolution	0.1°C
Units of measurement	°C, °F, K

RELATIVE HUMIDITY	
Range	0-100% RH
Accuracy	typically ±2% RH across full range
Resolution	0.1% RH
Units of measurement	% RH, g/m ³

BAROMETRIC PRESSURE	
Range	300-1250 hPa
Accuracy 900-1100 hPa, 25-40°C	Absolute (typically) ±0.4 hPa Relative (typically) ±0.08 hPa
Resolution	0.1 hPa
Units of measurement	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	Optical
Intensity range	0 to 200 mm/hr
Accuracy	≤ 5%
Tip size	0.1 mm
Units of measurement	mm/hr, mm total, in/hr, in total
Precipitation types	Liquid precipitation

OUTPUTS	
Digital comms modes	RS232, RS422 RS485, SDI-12
Protocols	ASCII, SDI-12 v1.3, NMEA 0183 MODBUS (RTU and ASCII)
Data outputs rates	1/s, 1/min, 1/hour, or polled

POWER SUPPLY	
Input voltage	5-30 VDC (10-30 VDC for heated models)
Average current consumption @ 12 VDC	50 mA continuous mode (std unit) 400 mA total with heating option +9 mA with GPS option

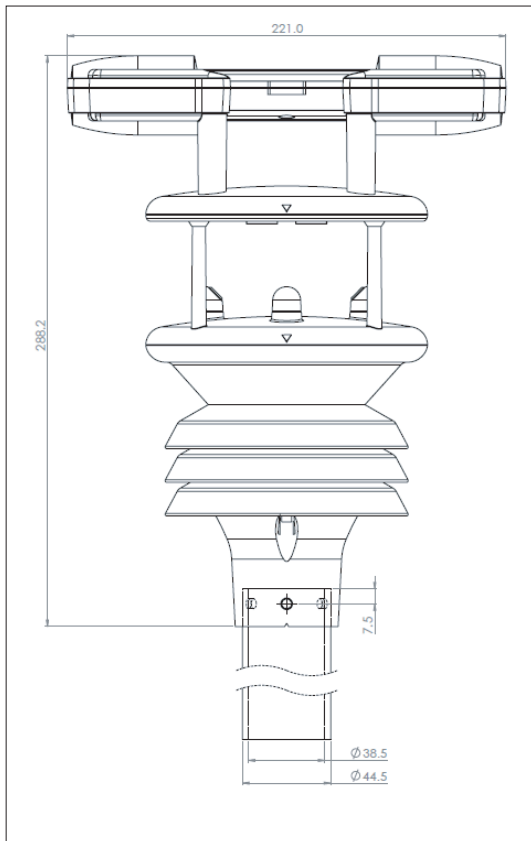
MECHANICAL	
Construction	UV stabilized thermoplastic
Fittings	Fit to 44.45 mm (1.75 in) pole or mast
Weight	1.1 kg
Connector type	8-way M12 connector

ENVIRONMENTAL	
Protection class	IP66
Operating temp.	-35°C to +70°C -40°C to +70°C with heating option
Storage temp	-40°C to +70°C

STANDARD EQUIPMENT (supplied with product)	
MaxiMet product	
Mating connector	
MetSet software*, to set-up and configure MaxiMet (comms mode, measurement units, reporting intervals, derived parameters, etc.)	
MetView software*, to view reported parameters	
MaxiMet User Manual*	
* downloadable from Gill Instruments website	

OPTIONS	
GPS	Available as an option. Enables reporting of location, height, real-time clock, true wind (for vehicle mounting applications)
Heating	Available as an option for operation in extremely low temperatures

WARRANTY	
Warranty	24 months



Designed and manufactured in the UK by Gill Instruments Limited.

EXAMPLE DERIVED PARAMETERS FOR MAXIMET RANGE (model dependent) A full list of derived parameters is available in the User Manual, downloadable from gillinstruments.com

Average wind speed*	Sunrise
Average wind direction*	Solar noon
Corrected wind speed	Twilight
Corrected wind direction	Sunset
Gust wind speed & direction*	Position of sun
Dew point	Angle of tilt
Wind chill	Pressure at sea level
Absolute humidity	Heat index

* WMO compliant

ACCESSORIES

A list of the accessories available to support MaxiMet is provided on the MaxiMet Accessories Datasheet, which can be downloaded from gillinstruments.com

MaxiMet Compact Weather Stations Accessories Datasheet

Reliable, high quality compact, integrated weather stations

MaxiMet weather stations are supported by a range of accessories. These accessories can be used to extend, upgrade and enhance MaxiMet. The accessories have been designed, or selected, to ensure the long term performance of MaxiMet products.

Accessories	Part Number
1.5m (5ft) Mast	15000001
2.0m (6ft) Mast	15000002
2.5m (8ft) Mast	15000003
3.0m (10ft) Mast	15000004
3.5m (11ft) Mast	15000005
4.0m (13ft) Mast	15000006
4.5m (15ft) Mast	15000007
5.0m (16ft) Mast	15000008
5.5m (18ft) Mast	15000009
6.0m (20ft) Mast	15000010
6.5m (21ft) Mast	15000011
7.0m (23ft) Mast	15000012
7.5m (25ft) Mast	15000013
8.0m (26ft) Mast	15000014
8.5m (28ft) Mast	15000015
9.0m (30ft) Mast	15000016
9.5m (31ft) Mast	15000017
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12.5m (41ft) Mast	15000023
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